

Amendments to the Specification:

Please amend the paragraph on page 18, at lines 1 to 23, as follows:

In the present embodiment of the invention, the designer identifies locations in the 3-D environmental database where certain levels of communication system performance are desirable or critical. These locations, termed “boundary positions”, are points in three-dimensional space, which the designer identifies by visually pointing and/or clicking with a mouse or other input device at the desired location in the 3-D environmental database. Any number of such boundary positions may be placed throughout the 3-D environment at an location, including other building floors, outdoors, or which separate buildings. Figure 3 depicts the facility layout with boundary locations and desired performance metrics specified 301. For example, such boundary locations may be anywhere in the modeled 3-D environment for the purposes of predicting the performance of a wireless communication system, or could identify telephone wall jacks, Ethernet ports, or other physical connections to a wired communication network. Although the display of the boundary locations in the present embodiment of the invention takes the form of textual strings which state the desired performance metric, colored cylindrical graphical entities whose color and/or height correspond to the desired performance metric, or ~~colored~~ asterisks as depicted in Figure 3, one skilled in the art could see how the boundary positions could be identified and represented in other manners. In addition, boundary conditions for wireless communication systems may be determined automatically from an algorithm or via “best guess” initialization as described in H. D. Sherali, C. M. Pendyala, and T. S. Rappaport, “Optimal Location of Transmitters for Micro-Cellular Radio Communication System Design”, IEEE Journal on Selected Areas of Communication, vol. 14, No. 4, May 1996.

Please amend the paragraph bridging pages 40 and 41, beginning on the last line of page 40, as follows:

Referring now to Figure 15, a simplified facility floor plan is shown. The same communication component system that was shown in Figure 6 has been updated. The communication component 603 ~~601~~ has been updated through the process described in function block 250 of Figure 13 such that the communication component model, position, and/or configuration has been updated to reflect the optimal settings chosen by the system.

Please amend the Abstract on page 46 of the application, at lines 6-27, as follows:

A method for engineering management and planning for the design of a communications network in three dimensions (3-D) combines computerized organization, database fusion, and site-specific communication system performance prediction models. The method enables a designer to keep track of communication system performance through the process of pre-bid, design, installation and maintenance of a communication system. ~~Using a database of information that defines the desired environment, predictions of the communication system performance criteria, such as received signal strength intensity (RSSI), throughput, bandwidth, quality of service, bit error rate, packet error rate, frame error rate, dropped packet rate, packet latency, round trip time, propagation delay, transmission delay, queuing delay, capacity, packet jitter, bandwidth delay product, handoff delay time, signal-to-interference ratio (SIR), signal-to-noise ratio (SNR), physical equipment price, installation cost, or any other communication system performance metric, can be made.~~ Automated selection, placement and configuration of communication component equipment can be performed using desired performance criteria identified at finite locations within the environment along with a finite set of communication component models and suitable locations and configurations in the environment.